

# DIGITALISATION

On 18 November 2022, the Board of Directors of the Company approved the updated programme on Digital Transformation of Rosseti Kuban, PJSC for the period until 2030 (Minutes No. 499/2022 dated 21 November 2022), hereinafter referred to as the Programme.

The Programme aims to increase the Company's operational efficiency across all functional areas in both traditional and emerging service markets.

 The major goals of the digital transformation are to improve the efficiency of operations and reliability of service delivery, change the logic of processes and offer new services through the introduction of high-tech solutions.

The Programme covers a number of functional areas of Rosseti Group's Digital Transformation Strategy and includes the following projects:

## Functional area of Rosseti Group's Digital Transformation Strategy

### Operation and diagnostics

Project	Expected effects after project completion
R&D: Development of a software package for the assessment and prediction of the technical condition and propagation of defects in 35–110 kV power transformers based on measurements performed by the automated monitoring and diagnostics system, as well as PAMS data, with the provision of relevant recommendations to operating personnel	<ul style="list-style-type: none"> <li>Increased reliability and service life of the oil-filled equipment in service and optimisation of processes in the PAMS</li> <li>Reliable mechanism for predicting the development of defects, using objective accumulated industry knowledge and modern data processing methods (BigData technology)</li> <li>Greater value to the end-user of the diagnostic information obtained from the Automated Monitoring and Diagnostics System (AMDS), thus paving the way for the transition from automated monitoring and diagnostic systems, which produce large amounts of diagnostic information that requires expert teams to interpret, to automated condition determination systems that rely on existing standards and allow the formation of an integral assessment for operational decisions on the management of production assets in the context of the common information model (CIM) concept</li> <li>Reduced labour costs and errors in manual data migration thanks to integration into the PAMS</li> </ul>
R&D: Development of a unified IoT platform for dispatching data about the status of substation equipment	<ul style="list-style-type: none"> <li>Reduced investment costs for equipment upgrades through increased observability</li> <li>Increased likelihood of preventing disturbances</li> <li>Reduced installation and maintenance costs for wired communications</li> <li>Reduced labour required for manual entry of measurement data using mobile devices</li> <li>Savings from improved reliability of electricity supply to consumers</li> </ul>
Creation of a distributed automation system in 6–10 kV distribution grids of Seversky PGR, branch of Rosseti Kuban, Krasnodar Power Grids and Dagomyssky PGR branch, Rosseti Kuban, Sochi Power Grids (design and survey work)	<ul style="list-style-type: none"> <li>Improved reliability of services in the electric power sector</li> <li>Increased observability of power grids</li> <li>Reduced capital investment and time for the construction of new or renovation of existing high-voltage transmission lines, by avoiding a change in voltage class (35–110 kV)</li> </ul>

### Sales of services and commercial electricity metering

Project	Expected effects after project completion
Creation of a smart metering system for the retail electricity (capacity) market	<ul style="list-style-type: none"> <li>Achievement of 8.42% electricity losses in the Company's grids by 2025, and 7.42% – by 2030</li> <li>Minimisation of discrepancies in billing for electricity transmission services</li> </ul>

### Information security

Project	Expected effects after project completion
Establishment of a system to protect critical information infrastructure facilities of Rosseti Kuban, PJSC	<ul style="list-style-type: none"> <li>Minimisation of risks associated with the termination of net delivery, downtime of administrative and management personnel due to the realisation of information security threats</li> <li>Compliance with information security directives at critical information infrastructure facilities</li> <li>Minimisation of financial and reputational risks associated with leaks of restricted information</li> </ul>
R&D: Automated classification of accidents based on machine learning methods	<ul style="list-style-type: none"> <li>Reduced overall risk of information security breaches, through timely response to information security threats identified by the system, related to anomalies in the behaviour of LAN nodes and user actions</li> </ul>

In addition, the programme plans to implement a number of PAMS development projects, as well as to participate in centralised projects of Rosseti, PJSC.

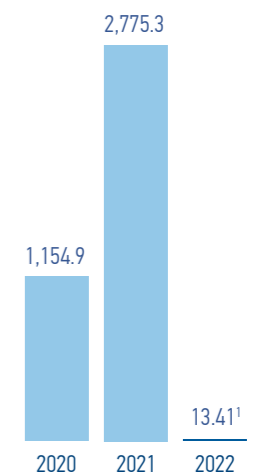
The digital transformation will also affect the following aspects of the Company's operations:

- **IT infrastructure development** – from purchasing software to collaborative development through partnerships and open platforms
- **Implementation of global best practices** – from benchmarking of best practices and purchase of solutions and/or technologies to R&D, development and trial operation of pilot samples and subsequent rollout within Rosseti Group

The Programme contains an action plan for the transition to the predominant use of domestic software for the period of 2022–2024.

The share of expenses on procurement of Russian software and related works (services) in the total expenses on procurement of software and related works (services) in 2022 was 92%, which is 2% higher than in the Programme.

**AMOUNTS OF FUNDING FOR ACTIVITIES OF THE DIGITAL TRANSFORMATION PROGRAMME OF ROSSETI KUBAN IN 2020–2022 (RUB MN)**



 The target model of digital transformation provides for the development of the Company in the main areas of activity: transmission and distribution of electricity, grid connection of consumers and grid development.

<sup>1</sup> The significant decrease in the amount of funding for the activities of the Programme in 2022 is driven by the new principles of the updated Programme; this amount does not include funding for the import substitution plans for software and radio electronic products.

